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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/084,172	02/28/2002	Takeshi Imamura	03500.016239	4812

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EXAMINER
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LILLING, HERBERT J

ART UNIT	PAPER NUMBER
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1651

DATE MAILED: 10/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/084,172

Applicant(s)

IMAMURA ET AL.

Examiner

HERBERT J LILLING

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 May 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-40 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

1. Receipt is acknowledged of the priority papers and the prior art information disclosure statement filed May 7, 2002.
2. Claims 1-40 are pending in this application.
3. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1, 4-6 and 29, 33 drawn to a polyhydroxyalkanoate having a unit represented by Chemical Formula 1 and charge control agent, classified in class 526, subclass one plus.
  - II. Claims 2 and 30 drawn to a polyhydroxyalkanoate having a unit represented by Chemical Formula 1 and at least one unit of Chemical Formulas (2) and (3) and charge control agent, classified in class 525, subclass one plus.
  - III. Claim 7-28 drawn to a process for producing polyhydroxyalkanoate having a unit represented by Chemical Formula 1 by culturing a microorganism containing a compound represented by Formula (7) or Formula (8), [polypeptone (claim 8) or yeast (claim 9) or saccharide (claim 10 and claim 11 saccharide selected from group), claim 12 (an organic acid or salt and claim 13 (organic acid selected from group) or amino acid (claim 14 and claim 15 amino acid selected from group) or straight-chain alkanoic acid (claim 16) or polypeptone and further organic acid (claims 17-18-19) classified in class 435, subclass 136.

- IV. Claim 31, drawn to a charge control agent polyhydroxyalkanoate having a unit represented by Chemical Formula 12 and charge control agent, classified in class 526, subclass one plus.
- V. Claim 32, drawn to a charge control agent comprising polyhydroxyalkanoate having a unit represented by Chemical Formula 12 and at least one unit comprising Formulas 2 or 3, classified in class 525, subclass one plus.
- VI. Claims 35-36, drawn to a toner binder comprising control agent classified in Class 399, subclass 120.
- VII. Claims 37-40, drawn to a process for image-forming method classified in Class 399, subclass 310.

4. The inventions are distinct, each from the other because:

the inventions are separate and patentably distinct from each other.

Inventions I and II are drawn to patentably distinct compounds having different structures and moieties.

Inventions III and I/II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the products of Inventions I or II can be made by another and materially different process, e.g. by organic synthesis.

The charge control agent of Invention V is patentably distinct from those of Inventions I or II.

Invention VI is drawn to a binder, which is separate and patentably distinct from that of Inventions I-V.

Invention VII is drawn to a process that is separate and patentably distinct from Inventions I-VI.

5. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, have acquired a separate status in the art because of their recognized divergent subject matter and the search required for one invention is not required for the other invention, thusly the restriction for examination purposes as indicated is proper.

6. This application contains claims directed to the following patentably distinct species of the claimed invention:

A. Whereby the additional unit in the polyhydroxyalkanoate is selected from

- i. Chemical Formula 2;
- ii. Chemical Formula 3;
- iii. Chemical Formula 2 and Chemical Formula 3.

B. Whereby the process for producing a polyhydroxyalkanoate involves:

- a. polypeptone;

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b. yeast extract;

c. saccharide

selected from the group consisting of:

c1. glyceraldehydes;

c2. erythrose;

c3. arabinose;

c4. xylose;

c5. glucose;

c6. galactose;

c7. mannose;

c8. fructose;

c9. glycerol;

c10. erythritol;

c11. gluconic acid;

c12. glucuronic acid;

c13. galacturonic acid;

c14. maltose;

c15. sucrose;

c16. lactose;

c17. mixture of above-please specify.

d. organic acid or salt thereof

selected from the group consisting of

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- d1. pyruvic acid;
  - d2. malic acid;
  - d3. lactic acid;
  - d4. citric acid;
  - d5. succinic acid;
  - d6. salt of above-please specify;
  - d7. mixture of above please specify.
- e. amino acid or a salt thereof
  - selected from the group consisting of:
  - e1. glutamic acid;
  - e2. asparatic acid;
  - e3. glutamic acid salt;
  - e4. asparatic acid salt;
  - e5. mixture of above-please specify.
- f. a straight-chain alkanoic acid having 4-12 carbon atoms or salt thereof.
- g. involves a combination of above a-f in the culturing of a microorganism to produce a polyhydroxyalkanoate-please specify the combinations.
- h. does not involve any of the above (a)-(g) compounds.

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C. Whereby the process involves culturing a microorganism in the presence of ;

- x. Chemical Formula 7;
- y. Chemical Formula 8;
- z. Chemical Formula 7 and Chemical Formula 8.

D. Whereby the process involves culturing in the presence of the following microorganisms:

- d1. *Pseudomonas chichorii* strain H45 or YN2;
- d2. *Pseudomonas jessenii* strain P161.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claim is generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.



Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

7. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

8. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).


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9. Applicant is required to comply with requirements for patent applications containing amino acid sequences based on page 172 containing amino acid sequences, see attachment.

10. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Examiner Lilling whose telephone number is (703) 308-2034 and Fax Number** is for applications **Before Final** (703) 872-9306 and **After Final** for applications is 703-872-9307 or SPE Michael Wityshyn whose telephone number is (703) 308-4743. Examiner can be reached Monday-Thursday from about 5:30 A.M. to about 3:00 P.M. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0196.

H.J.Lilling: HJL  
(703) 308-2034  
Art Unit 1651  
October 1, 2003

  
Dr. Herbert J. Lilling  
Primary Examiner  
Group 1600 Art Unit 1651